Statement of Peter B. Lyons
Commissioner, U.S. Nuclear Regulatory Commission
before the
Subcommittee on Clean Air and Nuclear Safety
Senate Committee on Environment and Public Works
on
NRC's Licensing and Relicensing Process for Nuclear Plants

July 16, 2008

Thank you Mr. Chairman, and Members of the Sub-Committee for holding today's hearing to discuss the "NRC's Licensing and Relicensing Process for Nuclear Power Plants." These are important issues, fundamental to earning the confidence of the American public in the safety of the nation's nuclear power plants. I support Chairman Klein's testimony and would like to elaborate further on two specific points.

Regarding the Next Generation Nuclear Plant, or NGNP, as the Chairman noted, we expect to deliver to Congress in August, jointly with DOE, our licensing strategy for the NGNP as required by the Energy Policy Act of 2005. This type of reactor offers specific potential safety enhancements over light-water reactor technologies. It may also enable the use of nuclear power not only in electricity production with enhanced efficiencies, but also as a source of process heat in industrial applications such as in production of hydrogen. However, this advanced technology presents a set of licensing challenges, such as the safety performance of new types of fuel, to which the NRC must respond with new regulatory research. As we continue to implement this strategy, the NRC will require resources that are appropriately matched with DOE funding on this project.

In addition to our ongoing work on the NGNP, the NRC staff is receiving an increasing number of requests for pre-application meetings by potential applicants for small (so-called "grid-appropriate") advanced reactor concepts for potential sales to developing nations and small-grid markets. There are currently no U.S. licensees expressing serious interest in building such plants, and that has limited our associated resource allocations. In my view, NRC engagement and research on the technical aspects of these designs is in our national interest in helping to assure that safe reactor designs are used abroad, as well as encouraging non-proliferation. I also believe that resources for such research should not be derived from fees paid by our existing licensees. Therefore, NRC resources for these activities are a matter for which Congressional guidance is needed. If this work is endorsed by Congress, I believe specific funding support in this area for the NRC would be appropriate.

In closing, I thank the Subcommittee for this opportunity to address these important topics and would be pleased to respond to your questions.